

IT Systems Engineering | Universität Potsdam

# Information Integration Exercise 2 – Social News Popularity

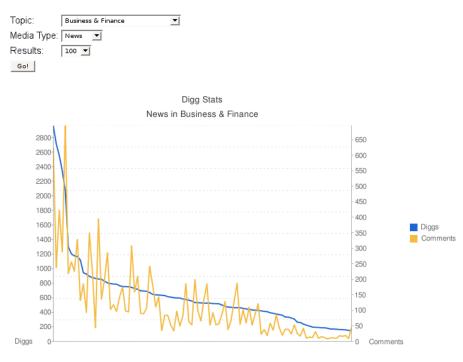
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## Starting Point – Digg Stats Mashup



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How YouPorn is ruining Porn DVD Sales 2967 diggs, 624 comments

Why Zappos Pays New Employees to Quit—And You Should Too 2714 diggs, 237 comments

Perhaps 60% of today's oil price is pure speculation 2553 diggs, 423 comments

150 Funniest Resume Mistakes, Bloopers and Blunders Ever 2343 diggs, 288 comments

Starbucks logo under fire: shows partially covered breasts 2065 diggs, 696 comments



- Integration of further social news/bookmarking services
  - Yigg (API)
  - □ del.icio.us (API)
  - Mister Wong, StumbleUpon, LinkArena, ...
- Visualisation of "Popularity" in a chart

# Query Language

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- Problem: Categories vs. Tags
  - Digg and Yigg arrange the items in categories
  - Categories differ very much from each other (not mergeable)
  - Bookmarking sites mostly rely on social tagging
- Solution: Keyword search

Keyword:	
Domain:	
Results:	100 💌
Go!	



## SocialItem

- □ Title Name of story or bookmark
- □ URL
- Date
- Popularity Diggs or number of bookmarking users
- □ Tags if available
- Origin



- del.icio.us: API only for personal bookmarks -> kicked!
- **Yigg:** API no free text search, google as search engine -> kicked!
- Digg: nice API, but does not allow free text search! -> web scraping
- Diigo: no API -> web scraping
- Mister Wong: same

## Heterogenities



## Popularity

- Social news services: votes/diggs
- Social bookmarking services: number of users
- Solution: scale factor
- Date
- HTML structure



- Merge identical items from different sources (duplicate detection)
  - Identified by same URL
  - Popularity added together
  - Tags merged
- Domain filtering
- Sort by popularity
- Reduce result set

## Result



Social News Stats Keyword: gentoo 65 60 55 50 45 40 35 Popularity 30 25 20 15 10 5 Popularity 0-

#### 🐰 🖬 Gentoo Linux -- Gentoo Linux News

Tags: logiciel\_libre source gentoo linux sysadmin distribution distro, Popularity: 66, 2008-05-13

#### 🖬 Gentoo Linux Wiki

Tags: gentoo wiki, Popularity: 26, 2006-06-03

Here Linux Disks (not Ubuntu) Popularity: 22, 2006-07-13

Separate Strain Strain